CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). A method of transforming color values of a first device-dependent color space into color values of a second device-dependent color space, to effect a substantially identical visual impression of colors reproduced in the first and second color spaces, the method which comprises:

providing a first color profile characterizing the first color space and providing a second color profile characterizing the second color space;

wherein the first and second color profiles specify an association between the color values of the first and second device-dependent color spaces and the color values of a device-independent color space;

wherein the first and second color profiles are formatted in accordance with the ICC specification (International Color Consortium);

wherein a white point of the first device-dependent color space, a white point of the second device-dependent color space, and a white point of the device-independent color space are described by device-independent white point values;

determining relative color values of the device-independent color space from the color values of the first device-dependent color space by way of the association specified in the first color profile;

converting the relative color values into absolute color values in a ratio corresponding to a ratio of the values of the white point of the first device-dependent color space ~~and~~ over the values of the white point of the device-independent color space;

determining chromatically adapted color values from the absolute color values by way of a chromatic adaptation transformation, the chromatic adaptation transformation includes converting the absolute color values into receptor signals L, M, S of color receptors by use of matrix multiplication;

converting the chromatically adapted color values into relative chromatically adapted color values in a ratio corresponding to a ratio of the values of the white point of the device-independent color space and the white point of the second device-dependent color space; and

determining color values of the second device-dependent color space from the relative chromatically adapted color values by way of the association specified in the second color profile.

Claim 2 (original). The method according to claim 1, which comprises carrying out the chromatic adaptation transformation by way of a Bradford matrix (B), with:

$$B = \begin{pmatrix} 0.8951 & 0.2664 & -0.1614 \\ -0.7502 & 1.7135 & 0.0367 \\ 0.0389 & -0.0685 & 1.0296 \end{pmatrix}.$$

Claim 3 (original). The method according to claim 1, which comprises carrying out the chromatic adaptation transformation in accordance with a von Kries matrix.

Claim 4 (canceled).

Claim 5 (original). The method according to claim 1, which comprises leaving unchanged the associations contained in the color profiles between the color values of the device-dependent color space and the color values of the device-independent color space.

Claim 6 (new). The method according to claim 1, which comprises converting the relative color values component by component into the absolute color values $[X_1, Y_1, Z_1]$ in the ratio of the white point values of the first device-dependent color space WP1 and the white point of the device-independent color space WPD50 according to the formula:

$$X1 = X_{PCS1} \times X_{WP1}/X_{WPD50}$$

$$Y1 = Y_{PCS1} \times Y_{WP1}/Y_{WPD50}$$

$$Z1 = Z_{PCS1} \times Z_{WP1}/Z_{WPD50}.$$